

CLAIM AMENDMENTS

1. (Currently Amended) A method comprising:

receiving, by a client device, electronic program guide (EPG) data from an EPG provider, the EPG data describing characteristics of media assets that are available from a content provider;

identifying, by the client device, one or more locally available media assets, the locally available media assets including:

a local media asset previously stored on the client device from a broadcast of a content provider over the network; and

a local media asset that is available for output through execution of an application installed on the client device, the application being selected from a group of applications;

generating, by a guide application on the client device, an EPG display based on the EPG data and the locally available media assets, the EPG display being configured to simultaneously display different types of media assets including the media assets that are available from the content provider and each of the local media assets as respective different types of media assets, each media asset being directly selectable through interaction with the EPG display;

receiving a user-submitted selection of a particular media asset represented in the EPG display, the particular media asset being selected from those being simultaneously displayed;

in response to the user-submitted selection of the particular media asset being received through interaction with the EPG display;

the guide application passing the user-submitted selection to a virtual tuner executed on the client device; and

[[a]] the virtual tuner executed on the client device selecting an application for presenting the particular media asset;

managing, by the virtual tuner, execution of the application for presenting the particular media asset.

2-7. (Canceled)

8. (Currently Amended) One or more computer ~~readable-media~~ storage media comprising computer executable instructions recorded thereon that, when executed on a computer, ~~direct~~ configure the computer to perform the method of claim 1.

9. (Currently Amended) In a virtual tuner executed on a client, a method comprising:

receiving, by the virtual tuner, a selection made from a plurality of content using an EPG that is output by the client, wherein:

the EPG includes a representation of each said content for simultaneous display by the client;

each said content is provided for output by a respective one or more of a plurality of applications; and

at least one said content is television programming;

choosing, by the virtual tuner, one or more of the plurality of applications that, when executed, provide the selected content represented by the EPG, wherein the choosing is independent of any application identifying information originating from a computer distinct from the client; and

managing, by the virtual tuner without user intervention, a lifecycle of the chosen one or more applications including execution of the chosen one or more applications to output the selected content.

10. (Canceled)

11. (Original) The method as described in claim 9, wherein the managing is performed in response to one or more events received from the EPG.

12. (Canceled)

13. (Original) The method as described in claim 9, wherein said content provided by a first said application is not compatible with a second said application.

14. (Original) The method as described in claim 9, wherein:
the managing includes managing one or more windows; and
at least one said window is utilized to display the selected content.

15. (Original) The method as described in claim 9, wherein the plurality of content includes remote content available over the Internet and local content available locally on the client.

16. (Currently Amended) One or more computer ~~readable-media~~ storage media comprising computer executable instructions recorded thereon that, when executed on a computer, ~~direct~~ configure the computer to perform the method of claim 9.

17-24. (Canceled)

25. (Currently Amended) A client comprising:

a processor;

a network interface, communicatively coupled to the processor, configured to provide a network connection to a wide area network (WAN);

an output interface, communicatively coupled to the processor, the output interface configured to provide an output for rendering by a display device; and

a memory configured to maintain:

a plurality of applications that are executable on the processor to provide an output of content on the output interface, the content including remote content available over the WAN and local content available locally on the client and the local content being comprised of user provided content;

an electronic program guide (EPG) engine that is executable on the processor to provide an EPG for output on the output interface, wherein the EPG simultaneously displays a plurality of representations of said content for selection; and

a virtual tuner that is executable on the processor to launch one or more of said plurality of applications in response to selection of said representations of said content, independent of any application identifying information originating from a computer distinct from the client, said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications.

26. (Original) The client as described in claim 25, wherein the virtual tuner is further executable to terminate execution of the one or more said applications.

27. (Original) The client as described in claim 25, wherein the virtual tuner is further executable to:

manage one or more windows corresponding to the plurality of applications; and
at least one said window includes a display of the selected said content.

28. (Currently Amended) The client as described in claim 25, wherein:
the network interface is configured as a tuner for receiving one or more broadcasts of the television programming over the WAN; and
the WAN is configured as a broadcast network.

29. (Original) The client as described in claim 25, wherein the content provided by a first said application is not compatible with a second said application.

30. (Currently Amended) The client as described in claim 25, wherein the WAN ~~[[is]]~~ includes the Internet.

31-40. (Canceled)

41. (New) A method as recited in claim 1, wherein the guide application, responsive to the particular media asset being selected, passes a selection to the virtual tuner, the selection including:

the user-submitted selection; and

an indication of how the particular media asset is encoded or encrypted.

42. (New) A method as recited in claim 1, the locally available media assets further including a user provided local media asset.

43. (New) A method as recited in claim 1, wherein the managing includes:
launching the chosen one or more applications for outputting the selected said content; and
terminating the chosen one or more applications when the outputting is completed.

44. (New) A method as recited in claim 1, wherein the managing includes:
launching the chosen one or more applications for outputting the selected said content; and
terminating the chosen one or more applications when an event is received from the EPG.

45. (New) A method as recited in claim 1, wherein the managing includes:
while a first media asset is being output, receiving an event indicating a request to output a second media asset;
determining whether the application that is executing to output the first media asset is of the type to output the second media asset, wherein:
in an event that the application is of the type to output the second media asset, outputting the second media asset by the application; and
in an event that the application is not of the type to output the second media asset, terminating the application that is executing and launching a new application that corresponds to the second media asset.

46. (New) A method as recited in claim 1, wherein the managing includes:
receiving an event that includes a universal content descriptor;
determining whether an application from the group of applications is currently providing a media asset for output;

in an instance no application from the group of applications is currently providing a media asset for output:

identifying, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;

launching the application corresponding to the event;

determining whether an action indicated by the event is to be performed by the application corresponding to the event;

in an instance the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or

in an instance the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action; or

in an instance an application from the group of applications is currently providing a media asset for output:

determining whether the event corresponds to the application currently providing the media asset for output;

in an instance the event does not correspond to the application currently providing the media asset for output:

terminating the application currently providing the media asset for output;

identifying, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;

launching the application corresponding to the event;

determining whether an action indicated by the event is to be performed by the application corresponding to the event;

in an instance the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or

in an instance the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action; or

in an instance the event corresponds to the application currently providing the media asset for output:

determining whether an action indicated by the event is to be performed by the application corresponding to the event;

in an instance the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or

in an instance the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action.

47. (New) One or more computer-readable media devices having computer executable instructions recorded thereon, the computer-executable instructions when executed on a computer, programming the computer to perform the method of claim 1.

48. (New) An article of manufacture having computer executable instructions recorded thereon, the computer-executable instructions when executed on a computer, programming the computer to perform the method of claim 1.

47. (New) A method as described in claim 9, wherein the plurality of content from which the selection of each said content is made is being displayed simultaneously for selection.

49. (New) A method as described in claim 9, wherein at least a second said content comprises user provided content.

50. (New) A method as recited in claim 9, wherein the managing includes:
launching the chosen one or more applications for outputting the selected said content; and
terminating the chosen one or more applications when the outputting is completed.

51. (New) A method as recited in claim 9, wherein the managing includes:
launching the chosen one or more applications for outputting the selected said content; and
terminating the chosen one or more applications when an event is received from the EPG.

52. (New) A method as described in claim 9, wherein managing the lifecycle includes the virtual tuner:
launching the chosen one or more applications;
terminating the chosen one or more applications; and
managing windows where the output of the selected content is rendered.

53. (New) A method as recited in claim 9, wherein the managing includes:
while a first content is being output, receiving an event indicating a second content to be output;
determining whether the application that is executing to output the first content is of the type to output the second content, wherein:
in an event that the application is of the type to output the second content, outputting the second content by the application; and
in an event that the application is not of the type to output the second content, terminating the application that is executing and launching a new application that corresponds to the second content.

54. (New) A method as recited in claim 9, wherein the managing includes:

- receiving an event that includes a universal content descriptor;
- determining whether an application from the group of applications is currently providing the selected content for output;
- in a scenario when no application from the group of applications is currently providing the selected content for output:
 - identifying, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;
 - launching the application corresponding to the event;
 - determining whether an action indicated by the event is to be performed by the application corresponding to the event;
 - in a scenario when the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or
 - in a scenario when the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action; or
- in a scenario when an application from the group of applications is currently providing the selected content for output:
 - determining whether the event corresponds to the application currently providing the selected content for output;
 - in a scenario when the event does not correspond to the application currently providing the selected content for output:

terminating the application currently providing the selected content for output;

identifying, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;

launching the application corresponding to the event;

determining whether an action indicated by the event is to be performed by the application corresponding to the event;

in a scenario when the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or

in a scenario when the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action; or

in a scenario when the event corresponds to the application currently providing the selected content for output:

determining whether an action indicated by the event is to be performed by the application corresponding to the event;

in a scenario when the action indicated by the event is not to be performed by the application corresponding to the event, causing the client to perform the event; or

in a scenario when the action indicated by the event is to be performed by the application corresponding to the event, causing the application corresponding to the event to perform the action.

55. (New) One or more computer-readable media devices having computer executable instructions recorded thereon, the computer-executable instructions when executed on a computer, programming the computer to perform the method of claim 9.

56. (New) An article of manufacture having computer executable instructions recorded thereon, the computer-executable instructions when executed on a computer, programming the computer to perform the method of claim 9.

57. (New) A client as described in claim 25, wherein each of said plurality of said representations includes respective encoding or encrypting information corresponding to an entry in the application identification table.

58. (New) A client as described in claim 25, wherein the virtual tuner further is executable on the processor to cause the one or more of said plurality of applications to:

provide the content being selected to the output interface; and

terminate the one or more of said plurality of applications when the outputting is completed.

59. (New) A client as described in claim 25, wherein the virtual tuner further is executable on the processor to cause the one or more of said plurality of applications to:
provide the content being selected to the output interface; and
terminate the one or more of said plurality of applications when an event is received from the EPG.

60. (New) A client as described in claim 25, wherein the virtual tuner further is executable on the processor to cause the one or more of said plurality of applications to:
provide the content being selected to the output interface;
terminate the one or more of said plurality of applications; and
manage windows where the output of the content being selected is rendered by the display device.

61. (New)) A client as described in claim 25, wherein the virtual tuner further is executable on the processor to cause the one or more of said plurality of applications to:
while output of a first content is being rendered by the display device, receive an event indicating a second content for output;
determine whether an application that is executing to output the first content is of the type to output the second content, wherein:
in an event that the application that is executing is of the type to output the second content, cause the application that is executing to output the second content; and

in an event that the application that is executing is not of the type to output the second content, terminate the application that is executing and launch another application from the one or more of said plurality of applications that corresponds to the second content.

62. (New) A client as described in claim 25, wherein the virtual tuner further is executable on the processor to cause the one or more of said plurality of applications to:

receive an event that includes a universal content descriptor;

determine whether an application from the plurality of applications is currently providing output of content;

in an event no application from the group of applications is currently providing output of content:

identify, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;

launch the application corresponding to the event;

determine whether an action indicated by the event is to be performed by the application corresponding to the event;

in an event the action indicated by the event is not to be performed by the application corresponding to the event, cause the client to perform the event;

or

in an event the action indicated by the event is to be performed by the application corresponding to the event, cause the application corresponding to the event to perform the action; or

in an event an application from the group of applications is currently providing output of content:

determine whether the event corresponds to the application currently providing the output of content;

in an event the event does not correspond to the application currently providing the output of content:

terminate the application currently providing the output of content;

identify, based at least on the universal content descriptor, an application corresponding to the event from the group of applications;

launch the application corresponding to the event;

determine whether an action indicated by the event is to be performed by the application corresponding to the event;

in an event the action indicated by the event is not to be performed by the application corresponding to the event, cause the client to perform the event; or

in an event the action indicated by the event is to be performed by the application corresponding to the event, cause the application corresponding to the event to perform the action; or

in an event the event corresponds to the application currently providing the output of content:

determine whether an action indicated by the event is to be performed by the application corresponding to the event;

in an event the action indicated by the event is not to be performed by the application corresponding to the event, cause the client to perform the event; or

in an event the action indicated by the event is to be performed by the application corresponding to the event, cause the application corresponding to the event to perform the action.